Amendment Under 37 C.F.R. § 1.116

U.S. Application No.: 10/520,520

Atty Dkt No.: 71465.0011

Customer Number 57362

REMARKS

Claims 1 and 3-7 and 9-11 are pending in this application. Claim 2 was previously canceled. The present amendments correct a typographical error and cancels Claims 8 and 12-15.

Applicants submit that no new matter is being added and no new issues are being presented.

Accordingly, entry of the present Amendment is respectfully requested.

Claim Rejections Under 35 U.S.C. § 103

Claims 1, 3-5 and 8-15 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Yoshiyuki et al. (JP 63-302950) in view of Kaneko et al. (U.S. Patent Application Publication No. 2001/0053467) and Noguchi et al. (U.S. Patent No. 4,237,030). Claims 6-7 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Yoshiyuki et al., Kaneko et al. and Noguchi et al. as applied to claim 1, and further in view of JP 11-26263. Applicants respectfully request reconsideration and withdrawal of these rejections and allowance of the claims.

As a preliminary matter, the Examiner is thanked for his consideration of the June 3, 2008 Amendment, the arguments of which are hereby incorporated herein.

Applicants again respectfully submit that Yoshiyuki does not render the present claims obvious, at least because Yoshiyuki does not include a noble metal as part of a mixture of a precrystallization composition of elementary components, noble metal, and a powder of theta-alumina and/or alpha-alumina, as required by the present claims. Yoshiyuki describes that activated alumina powder containing a perovskite-type composite oxide is obtained first, applied to a monolith support and baked. After being baked, the support is impregnated with noble

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metals. As a result, the catalyst thus produced has noble metals that are supported on **both** perovskite-type composite oxide and alumina, as shown in Fig. 1 below.

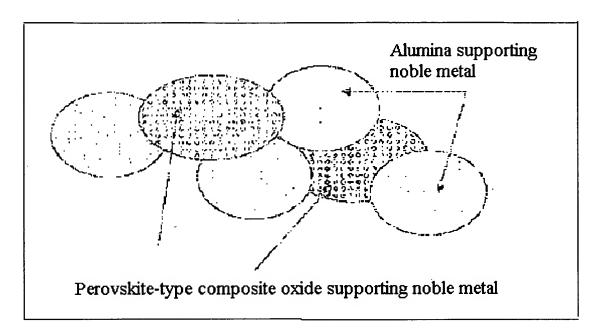


Fig. 1 Yoshikuki (Nobel metal is supported as a whole)

In contrast, in the methods of the present invention, a pre-crystallization composition containing elementary components constituting a perovskite-type composite oxide containing a noble metal is mixed with alumina, and the mixture thus obtained is baked (note: "subjecting the mixture to heat treatment" (*emphasis added*), as recited in Claims 1, 8, and 12). As a result, the catalyst thus produced has noble metals that are supported on the perovskite-type composite oxide only, as shown in FIG. 2 below.

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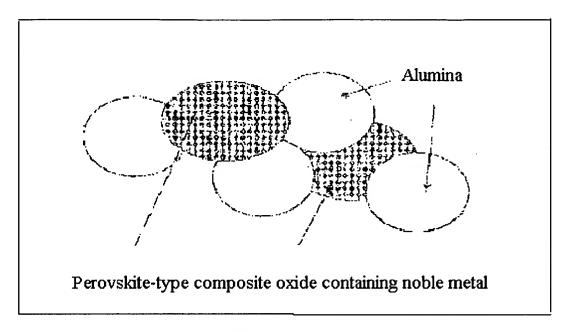


Fig. 2 Present Application

Thus, in the present invention, the noble metals exist in the crystal structure of the perovskite-type composite oxide. Accordingly, both the presently claimed methods and the final product obtained by the presently claimed methods are different from those of the primary reference, Yoshiyuki, as demonstrated in Figs. 1 and 2 above.

In the final Office Action, the Examiner took the position that the catalyst composition of Yoshiyuki would be considered a "mixture" at any point during the process (even after coating with noble metal), at which point, the perovskite could be partially crystallized due to the heat treatment. Applicants respectfully disagree with the Examiner's interpretation of the term "mixture" as it applies to Yoshiyuki. The present claims are quite clear that the "mixture" that is subject to heat treatment in the claims, is a mixture of <u>pre-crystallization</u> composition (containing

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elementary components constituting a perovskite-type composite oxide containing a noble metal) with a powder of theta-alumina and/or alpha-alumina. Thus, even if the Examiner considers the Yoshiyuki coating as being part of a mixture (which applicants do not concede), such a mixture is not of a <u>pre-crystallization composition</u> with a powder of theta-alumina and/or alpha-alumina as required by the claims. Accordingly, for at least this reason, Applicants again submit that Yoshiyuki et al. do not render the present claims obvious.

The Final Office Action also takes the position that it would have allegedly been obvious to combine the teachings of Kaneko et al. with Yoshiyuki et al. Applicants respectfully submit however, that one skilled in the art would not try to modify the teachings of Yoshiyuki as suggested, because Yoshiyuki et al. is directed to an entirely different process than that of the present invention and yields a completely different result. As indicated above, in the presently claimed methods, the noble metals exist in the crystal structure of the perovskite-type composite oxide, as opposed to noble metals being deposited over the carrier (as in Yoshiyuki et al.). There is no indication in the Yoshiyuki reference that the coated structure disclosed therein may be completely changed as suggested by the Examiner, and result in a catalyst that may be suitable for the reference's specifically recited intended purpose of improving the purifying capacity for hydrocarbons, CO and NOX of a waste gas purifying catalyst. Accordingly, Applicants respectfully submit that there is no reason why one skilled in the art would try to modify Yoshiyuki et al. as suggested in the Action.

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Further, Applicants submit that there is no motivation for one to try to combine Kaneko with Yoshiyuki to try to arrive at the present invention. Kaneko is directed to a fuel reforming catalyst or electrode catalyst, but not a catalyst for clarifying exhaust gas. The present claims are directed to methods for producing an exhaust gas purifying catalyst. Accordingly, Applicants respectfully submit that there is no reason why one skilled in the art would combine the cited references to try to arrive at the present invention.

Additionally, as indicated previously, Applicants respectfully submit that one skilled in the art would not be motivated to combine the references because Nogushi is directed to very different carriers that do not include a perovskite-type compound. But even if one did try to combine the references, Nogushi et al. does not make up for the deficiencies of Yoshiyuki et al. In particular, Nogushi does not teach a mixture that includes elementary components of a perovskite-type composite oxide containing a noble metal, and powder of theta-alumina and/or alpha-alumina. Accordingly, for at least these reasons, Applicants respectfully submit that the present claims are not obvious over Yoshiyuki et al. in combination with Nogushi.

For at least the reasons indicated above, Applicants respectfully request that the Examiner reconsider and withdraw the present rejections and allow the application.

If the Examiner believes that there is any issue which could be resolved by a telephone or personal interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

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Applicants hereby petition for any extension of time that may be required to maintain the pendency of this case, and any required fee for such an extension is to be charged to Deposit Account No. 50-0951.

Respectfully submitted,

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